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Morphosyntactic Structure of Tonga (M64) Noun Deverbatives

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ABSTRACT

Motivated by the discussions from various authors on morphological patterns in different languages of the world, this study examines the morphosyntactic structure of deverbative nouns in Tonga (M64), a Bantu language spoken primarily in Zimbabwe and Zambia. In Zimbabwe, Tonga is one of understudied languages that employs a complex morphological patterns of norminal derivation, whereby affixes which are most common ways of Bantu languages in creating nouns using different adjuncts of a final vowels (FV) /-i /, /-e-/ and /-o/, clitics /-ma/ and /-nyina/ and optional prefixation of nominal class markers are added to the verbal base elements. Canonically, in word formation every language has a unique characteristics system of word creativity. Therefore, Tonga lexicon deverbatives are considered as syncretic unities that are built by the prefixation and suffixation or merging the grammatical features of both nouns and verbs. In this paper, researchers argue that in Tonga language; deverbatives categories are from those of infinite verbs and imperatives. Using Pustejovsky's (1996), Generative Lexicon Theory (GLT), the analysis demonstrates how semantic roles and syntactic structure are encoded in the derived nominals, both inflectionally and derivationally in ChiTonga. Employing a qualitative descriptive approach, the research reveals that Tonga deverbatives function not only in their literal sense but also serve metaphorical extensions, enriching the language's expressive capacity.

KEYWORDS

Deverbative nouns; Tonga (M64); morphosyntax; nominalization; Generative Lexicon; metaphorical extension

INTRODUCTION

Deverbatives are nouns formed from verbs that vary from language to language and they are more at the time morphemic complications (Bussmann 1996). According to Akimova and Mochalova (2020, p.16) deverbatives result from the semantics of an abstract action and are mainly divided into two categories according to their semantic structure: the actions performed by human beings and the ones without their participation. In each language there are certain morphemes that are affixed to verbs to make them nouns (cf Mletshe 2010, 2017, Mufwene 1980, Katamba 2003, Krüger 2006, Dingemanse 2006). This study falls under derivational morphology and contributes to a deeper understanding of Bantu morphology in general and Tonga deverbaives in particular showing how it creates new lexical item/changes one word (or lexeme) into another. It examines the morphosyntactic structure of deverbative nouns in Tonga (M64), a Southern Bantu language spoken primarily in Zimbabwe and Zambia.

There are a lot of studies that have been carried out on deverbatives in different languages leading to the examination of noun class prefixes so as to determine their semantic meaning. These include Meeussen's (1967) an analysis of Bantu grammatical systems, Mudzingwa and Kadenge (2014) discuss class 1 deverbal and non-deverbal nouns in Shona while Kambou (2003) looks at the verbo-nominal roots in Lobire language showing morphophonological operations in suffixation and Everlyne (2023) analyses the morphophonemic alternations of Ekegusii nominal derivation and Chiyonga (2009) discusses the grammar of compound nouns in Tonga and identifies some of compound deverbal nouns. However, there is little attention drawn to Tonga derivational morphemes; therefore, this paper analyses the morphosyntactic structure of deverbative nouns in Tonga (M64), particularly on Zimbabwean Tonga. Tonga shows unique morphosyntactic structure whereby concrete and abstract nouns are formed from obligatory verb roots, and optionally prefixes and suffixes. In the light of Pustejovsky's (1996) GL Theory, it is shown in this paper how different adjuncts of a final vowels (FV) /-i- /and /-o-/, and clitics /-ma/ and /-nyina/ and optional prefixes of nominal class markers when added to the verbal base elements trigger a semantic change to the word category.

The insights of Pustejovsky's (1996) paradigm, the Generative Lexicon Theory (GLT) explains that lexical meaning has four different levels of representation, namely argument structure, qualia structure, event structure and lexical inheritance structure. This study uses these four levels of semantic representation to provide a compositional interpretation of words in morphological deviational manner. According to Mletshe (2017, p. 33) these levels are able to handle nominalisation, viewed in syntax as a category-changing operation, which requires the positing of an abstract verbal categories. In light to GL Theory, researchers answer the following questions, how do the syntactic patterns of Tonga morphemes affect the semantic of a word, following their common grammatical alternations and which classes are represented in these derivative categories.

Through the lens of Pustejovsky's paradigm, present researchers handle intricate linguistic distinctions that are provided by GLT in its two assumptions that play a crucial role in a lexical semantic framework: the syntactic structures and semantics of natural language. Pustejovsky (1996, p. 6) notes that there are basically three principles that should guide computational lexical semantics namely a clear notion of semantic well-formedness, lexical semantics must look for representations that are richer than thematic role descriptions, syntactic categories in order to characterize the semantics of natural language. Pustejovsky (ibid: 8) further contends that the semantic type is the most fundamental aspect of a word's meaning, and that categorical or type information determines not only how a word behaves syntactically, but also what the elements of the category refer to. Therefore, GLT provides present researchers with tools of great descriptive power for the semantics of lexical items and with the devices that allow us to make a number of important generalisations (Busa, 1996, p. 27).

Tonga (M64) is one of the Bantu languages, predominately spoken in different countries, namely Zimbabwe and Zambia. In Guthrie's (1948) classification of Bantu languages, Tonga belongs to Zone M in group 60 where it is the 4th language with 3 dialects, such as Leya, Toka, and Tonga. While Doke (1959) identifies four Tonga dialects as follows: Plateau Tonga, Valley Tonga, We, and Totela. These dialects are spoken in Zambia. On the other hand, Mumpande (2006) mentions the varieties that are spoken in Zimbabwe with four dialects, namely Chinamalundu, Chiwe, Chinamwemba and Chidombe. In this study, examples are drawn from Chinamalundu a Zimbabwean variety because the researchers are native speakers of these varieties..

RESEARCH METHODS

Data Collection Methods

This paper used qualitative research which is effective in obtaining information about behaviours, opinions and social contexts of a particular population. It is concerned with understanding people's experiences in a simple, and analytical way and seeks answers to research questions using a systematically pre-defined set of procedures. Present researchers relied mainly on their intuition as the primary source of data.

Intuition

Intuition normally bases on native speakers' judgments about lexicons and sentences in their language. This is when one introspects the way one could speak in a particular situation (Kuchera, 2007). Bearing this in mind present researchers introspect some words and sentences that exhibited deverbative forms Tonga. However, it is important to note the fact that the trio, researchers are Tonga native speakers, and grew up among the BaTonga speaking community and they are keen to refer back to experiences in order to bring Tonga deverbatives. Just like other methods of data collection intuition has its own flaws where intuitive data is idiolect in nature (Radford, 1986). Therefore, data was verified by other Tonga speakers from Binga and Hwange districts.

Procedures

Researchers generated a list of Tonga verbs, and nouns and sentences, and identified 12 Tonga native speakers from that is Binga and Hwange who verified the data. From each district 6 people were purposively sampled and given data for three days to verify it. In Binga, participants were from Binga south and those from Hwange were from Cross Dete. On the fourth day they were asked to read out aloud one by one. As they read the list, the researchers recorded the deverbatives on paper. Having done the whole process, in each area both the researchers and respondents checked the final copy of the list and agreed that those were the correct nouns as used in the ChiTonga. After that, the researchers compiled data on a spread sheet checking word correspondences of deverbatives. Verbs, nouns and sentences were obtained from their intuitive knowledge of Tonga and others were obtained from participant. At most 118 deverbative words and sentences were generated and analyzed using GLT. Participants were numbered from 6 up to 18, this was done do protect the names of the interviewees.

Tonga Phonetic Inventory

There are five vowels in Tonga as shown in table 1 below

Table 1. Tonga Vowel System

		Front	Central	Back	
Un-rounded	**High**	i		u	Rounder
	Mid	e		o	
	Low		ɑ		

Consonant System

Tonga consonant inventory is presented below in table 2. There are twenty six distinctive consonants in Tonga language.

Table 2. Tonga Consonant Chart

	Bilabial		Labio dental		Alveolar		Post Alveolar		Palatals		Velar		Post-Velar		Glottal	
	-	+	-	+	-	+	-	+	-	+	-	+	-	+	-	+
Stops/ Plosives	p	b			t	d					k	g				
Nasal		m				n				ɲ		ŋ				
Fricatives		β	f	v	s	z	ʃ	ʒ		j		ɣ			h	ɦ
Affricates							ʧ	ʤ								
Lateral						l										
Approximants						j								w		

Morphology of Tonga Noun Class System

In most of Bantu languages, like ChiTonga, nouns consist of two main parts; a noun prefix and a noun stem and that every noun belongs to a noun class by virtue of the form of its prefix. The derivation of these nouns occurs in various ways. That is, nouns may be recognised morphologically and are all specified for certain noun classes which are standard through prefixes (Du Plessis, 1997, Bleek 1862, Meinhof 1932, Guthrie 1948). In Tonga there are nouns derived from verbal forms particularly deverbatives. According to Mudzingwa and Kadenge (2014) all noun class prefixes encode semantic information, gender and number. These forms on determine their characteristic semantic meaning. Proto-Bantu noun prefixes realizes a semantic system where each prefix is associated with a characteristic meaning, a notion espoused (cf. Payne and Olsen 2009, Katamba 2003, Krüger 2006, Dingemanse 2006). In this article Tonga noun class prefixes are numbered according to Meinhof's system of enumeration in Ur Bantu as illustrated in table 3 below.

Table 3. Tonga Noun Classes

Class number	Noun Prefix	Example	Gloss
1	mu-	muzovu [muzovu]	'elephant'
1a	Ø-	taata [ta:ta]	'father'
2	ba-	basankwa [βasankwa]	'boys'
2a	ma-	mamama [mamama]	'mothers'
3	mu-	musamu [musamu]	'tree'
4	mi-	misamu [misamu]	'trees'
5	li-	linso [linso]	'eye'
6	ma-	menso [menso]	'eyes'
7	chi-	Chibunge [ʧiβuŋge/ ji̯βuŋge]	'bread'
8	zi-	zibunge [ziβuⁿge]	'breads'
9	n/m-	nkuku [nkuɣu]/ mbelele [mbelele]	'chicken'/ 'sheep'
9a	Ø-	Sokwe [soɣwe]	'baboon'
10	n/m-	nkuku [nkuɣu]/ mbelele [mbelele]	'chicken'/ 'sheep'
11	lu-	luyando [luyando]	'love'
12	ka-	kaleba [ɣaleβa]	'small axe'
13	tu-	tuleba [tuleβa]	'small axes'
14	bu-	butolo [βutolo]	'laziness'
15	ku-	kulila [ɣulila]	'to cry'
16	a-	aachiluli [a:ʧiluli]	'on the roof'

17	ku-	Kumulonga [ɣumuloŋga]	‘at/to the river’
18	mu-	mung’anda [muŋanda]	‘in the house’

Source adopted from Sibajene 2013

Noun classes in Tonga are generally paired into singular and plural categories based on their prefixes that encode gender, number and semantic characteristics. Harjula (2004) states that noun class prefixes 1, 3, 5, 7, 11, and 12 always convey singularity, and classes 2, 4, 6, 8, and 13 plurality. Classes 6 and 14 convey plurality when alternating with one of the singular prefixes, but for noun stems that convey enumerable are from class 6 and abstractions from class 14. According to Katamba (2003, pp.115-116) paired noun classes in Bantu languages include: 1/2 (human), 3/4 (natural phenomena like plants and animals), 5/6 (paired things, collective nouns, liquids), 7/8 (body parts, tools, animals and insects, language names, and augmentatives), 9/10 (mostly animals), 11/10 (long thin items), 12/13 (mostly diminutives), 14/6 (abstract nouns), and 15 (infinitives and a few body parts). Classes 16, 17 and 18 are locative classes. Hang’ombe (2015) notes that in Tonga, classes 16, 17 and 18 are locative classes corresponding to English language prepositions: 16 > on ‘*achiluli* ‘on the roof’, 17 > at/to *kunyika* ‘to the North’ and 18 > in *mumulonga* ‘in the river’. Class 17 denotes locative in general, class 18 being inside or locatives with reference to home area or country. Nouns in these classes do not take plurality.

RESUTS AND DISCUSSION

Deverbatives forms in Tonga are presented discussed below

Deverbatives Nouns in ChoTonga

Since verbs do not fall under specific noun classes, most different deverbative nouns were identified in Noun Classes 1, 2, 7, 8, 11, 12, 13 and 14 of Tonga Noun Class System. Data were further categorised into classes depending on the characteristics the nouns demonstrated. Some are abstract while others are concrete nouns and these categories are discussed under the sub-topics that follow.

Tonga Personal Deverbatives

In Tonga personal deverbatives, a derivative morpheme is affixed to verbs to make them nouns. Data below indicate how derivative morpheme [-i-] and [-e-] trigger verbs to be deverbative nouns and their derivative segments. A morpheme is the smallest form of meaning. According to Katamba (1993:24) it is the smallest difference in the shape of a word that correlates with the smallest difference in a word or sentence meaning or in grammatical structure. In ChiTonga, the operation is performed whereby a verb is suffixed with either morpheme [-i-] or [-e-] and the verb ending is substituted by the latter morpheme. When a verb is suffixed, hence there is a change in category as shown below in 1 up to 10.

Derived Tonga Personal Concrete Nouns

1. *Lemba* [le^{m}ba]‘write’ > mu- lemb – i- (a) > *mulembi* [mule^{m}bi] ‘writer’
[Prf-VR-DER MORPHEME-FV] [Nominal]

2. *Lima* [lima] ‘cultivate’> ba- lim- i – (a) > *balimi* [βalimi] ‘farmers’
[Prf-VR-DER MORPHEME-FV] [Nominal]

3. *Syanga* [ʃa^{ŋ}ga/sja^{ŋ}ga] ‘sow’ > mu- syang- i- (a) > *musyangi* [muʃa^{ŋ}gi/ musja^{ŋ}gi] ‘sower’
[Prf-VR-DER MORPHEME-FV] [Nominal]

4. *Luma* [luma] ‘bite’ > mu- lum- i- (a) > *mulumi* [mulumi] ‘one who bites/ husband’
[Prf-VR-DER MORPHEME-FV] [Nominal]

5. *Vuna* [vuna] ‘rescue’ > mu- vun- i- (a) > *muvuni* [muvuni] ‘savior’

[Prf-V R-DER MORPHEME-FV] [Nominal]

6. *Beteka* [βeteɣa] 'judge' > ba- betek- i- (a) > *babetesi* [βaβetesi] 'judgers'
[Prf-V R-DER MORPHEME-FV] [Nominal]

7. *Sotoka* [sotoɣa] 'jump' > ba- sotos- i -(a) > *basosyi* [βasotsʲi] 'instructors of jumping'
[Prf-V R-DER MORPHEME-FV] [Nominal]

8. *Beleka* [βeleɣa] 'work' > mu- belek- i- (a) > *mubelesi* [muβelesi]'employer'
[Prf-V R-DER MORPHEME-FV] [Nominal]

9. *Nyema* [ɲema] 'be angry' > mu-nyem-e-(a) > *munyeme* [muɲeme] 'one who is angry'
[Prf-VR-DER MORPHEME-FV] [Nominal]

10. *Bomba* [βomba] 'be humble' > mu-bomb-e- (a) > *mubombe* [muβombe] 'one who is humble'
[Prf-V R-DER MORPHEME-FV] [Nominal]

The above data in 1 to 8, indicate that the class of the word changes from the verb to a noun due to the influence of a derivational morphemes [-i-] and [-e-]. In Tonga language, personal nouns are derived from **CLASS 1** and **2** and they take the prefixes [*mu*-] in the singular and [*ba*-] in plural, respectively. This means that concrete nouns are formed as a result of certain actions. The morpheme [-i-] or [-e-] derivate verbs to become deverbatives. The noun class prefixes, *mu*- and *ba*- only inflects the category marking singular and plural personal nouns exclusively**.** For instance, in example **4** the verb *luma* 'bite' is inflected by prefix *mu- to mu-lum-i- (a)* referring **singular person**, while the suffixed morpheme [-i-] triggers grammatical change of a verb to a deverbative form as *mulumi* 'husband'. And morpheme [-e-] do the same as shown in example 10 above.

The same derivative morpheme [-i-] in certain environment causes some neighboring segments to change completely while in other environment it does not, for instance in **1** to **5** above only changes the categories while in **6** to **8** a derivational morpheme [-i-] affects both the preceding segment and meaning of verb root (VR). According to Katamba (1989) when a velar consonant is followed by a front vowel, there occurs some slight anticipatory fronting of the part of the tongue that makes contact with the roof of the mouth. As indicated above in example **7,** verb *sotoka* [sotoɣa] after being inflected by a prefix *mu*- and derivational morpheme [-i-] becomes **ba-sotoɣ-i- (a)** > *basotosi* [βasotosi] 'instructors of jumping]. In this scenario the derivational morpheme [-i-] triggers fronting process where back sound [ɣ] a velar fricative changes to an alveolar fricative [s]. In phonation, also there is devoicing whereby the affected preceding sound which is voiced [+] becomes voiceless [-]. This change in the place of articulation results from retrogressive assimilation. The final vowel (FV) in the radical stem is deleted when the suffix [-i-] attaches to it. This process takes place in order to avoid hiatus in Tonga.

Diminutive or Pejorative Deverbatives

There are diminutive deverbatives that are formed in Tonga class prefixes 7, 8, 11, 12 and 13, when they are attached to verbs. Tonga personal deverbatives may be in derogatory (diminutive) nature when Classes 1 prefix /mu-/ and 2 prefix /ba-/ are replaced by the class prefix of the diminutive class as illustrated below in 9 to 12

11. *Babetesi* [βaβetesi] 'judgers' > tu-betek- i- (a) > *tubetesi* [tuβetesi] 'small judgers'
[Prf-V R-DER MORPHEME- FV] [Nominal]

12. *Babelesi* [βaβelesi] 'employers' > zi- belek- i- (a) > *zibelesi* [ziβelesi] 'bad employer'
[Prf-V R-DER MORPHEME- FV] [Nominal]

13. *Mulumi* [mulumi] 'bite' > chi- lum- i- (a) >*chilumi* [ʧilumi] 'his/her ugly husband/ bad biter'
[Prf-V R-DER MORPHEME- FV] [Nominal]

14. *Mulimi* [mulimi] 'farmer' > ka- lim- i- (a) > *kalimi* [ɣalimi] ' small ugly farmer'
[Prf-V R-DER MORPHEME- FV] [Nominal]

In Tonga language, when personal classes 1 prefix [mu-] and 2 prefix [ba-] in certain deverbatives are substituted by classes, 7, 8, 11, 12 and 13 which take class prefixes [chi-], [zi-], [lu-], [tu-] and [ka-] respectively, diminutive nouns are formed. These classes do not change the category of the noun, but they become pejoratives.

Relative Deverbatives Nouns

In Tonga language when clitics /-**ma**/ and /-**nyina**/ are suffixed to certain personal deverbative their category changes to relative deverbatives as indicated below by one of the participants in a to k.

a. *Musyomi* [muʃomi] 'believer > mu-syom-i-(a)-ma > *musyomima* [muntuma]'my fellow believer'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

b. *Mulimi* [mulimi] 'farmer' > mu-lim-i- (a)-ma > *mulimima* [muʤʷama] 'my fellow farmer'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

c. *Mujiki* [muʤiɣi] 'cook' > mu-mujiki-ma > *mujikima* [muʤiɣima] 'my fellow cook'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

d. *Mulumi* [mulumi] 'husband' mu-lum-(a) –i-ma > *mulumima* [mulumima] 'my fellow brother in law'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

e. *Mulembi* [mulembi] 'writer' mu-lemb-i- (a)- nyina> *mulembinyina* [his/ her mulembiɲina] 'fellow writer'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

f. *Muvubi* [muvuβi] 'rich person' mu-vub-i- (a)-nyina > *muvubinyina* [muvuɣiɲina] 'his/her fellow rich person'

[Prf-VR-DER MORPHEME-FV- Clitics] [Nominal]

g. *Muleli* [muleli] 'president'> mu- lel-i- (a)-nyina > *mulelinyina* [muleliɲina] 'his/her fellow presedent'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

h. *Balwani* [βalʷani] 'fighters'> ba-lwan-i- (a) -nyina > *balwaninyina* [βalwaniɲina] 'his/her fellow fighters'

[Prf-VR-DER MORPHEME-FV-Clitics] [Nominal]

i. *Mwembeli* [mʷembeli] 'shepherd'> mu- e-mbel-i-(a)-nyina> *mwembelinyina* [mʷembeliɲina] 'his/her fellow shepherd'

[Prf-AUG-VR-DER MORPHEME-FV-Clitics] [Nomina]

Data from interviews in **a** up to **i** above shows relative deverbatives. Respondent 16 indicated that clitics /-*ma*/ [-ma] and /-*nyina*/ [-ɲina] when are suffixed to deverbative nouns they change a common personal noun to a relative noun. Morpheme /-ma/ triggers a non-relative deverbative to a relative deverbative noun, as shown in c) where *mujiki* [muʤiɣi] 'cook' a common personal noun becomes *mujikima* [muʤiɣima] a relative common person noun. Also, clitic /-*nyina*/ in h) *balwani* [βalʷani] 'fighters' changes to *balwaninyina* [βalwaniɲina] 'his/her fellow fighters'. Both moprhemes /-ma/ and /-nyina/ maintain the number but triggers a common person noun to a relative noun.

Tonga Impersonal Deverbatives Nominals

Nominal morphology involves a system of adjustments in the noun's form and modifications in the ways speakers intend to be interpreted in discourse (Everlyne, 2023, p.

18). Impersonal nominals are formed through morphological changes that assign them to non-human, impersonal noun classes. In Tonga language derived impersonal deverbal nominals do not refer to a specific actor or person and they often refer to abstract nouns. The nouns that were collected denote events, actions and abstract ideas. As highlighted by respondent 13 that this process mostly occurs in specific Noun Classes like 11, 12, 13 and 14 as indicated in data below from i. to viii.

i. *umuna* [umuna] 'be quiet' > lu- umun- (a) -o > *luumuno* [lu: muno]'peace'
[Prf- V R- FV- DER MORPHEME] [Nominal]

ii. *aᵑgunuka [aᵑgunuɣa]* 'feel free' > lu- ang- unuk- (a)- o > *lwangunuko* [lʷaᵑgunuɣo] 'freedom'
[Prf- VR –Ext Morpheme-FV- DER MORPHEME] [Nominal]

iii. *ita* [ita]'call' > lu- it- (a)- o > *lwiito* [lʷi:to] 'a calling'
[Prf- VR- FV- DER MORPHEME] [Nominal]

iv. *imba* [iᵐba] 'sing' > lu- imb (a) - o > *lwiimbo* [lʷi:ᵐbo] 'song'
[Prf-VR- FV- DER MORPHEME] [Nominal]

v. *etelela* [etelela] 'be sympathetic' > lu- etelel (a) - o > *lwetelelo* [lʷetelelo] 'sympathy'
[Prf- VR- FV- DER MORPHEME] [Nominal]

vi. *ana* [ana]'tell a story' > ka-an (a) - o > *kaano* [ɣa:no]'foltale'
[Prf- VR- FV- DER MORPHEME] [Nominal]

vii. *amba* [aᵐba] 'say' > mu- amb- (a) -o > *mwaambo* [mʷa:ᵐbo]'statement'
[Prf-VR- FV- DER MORPHEME] [Nominal]

viii. iya [ija] 'learn' > lu- iy- (a) -o > *lwiiyo* [lʷi:jo] 'education'
[Prf-VR- FV- DER MORPHEME] [Nominal]

The data in **i** to **viii** above, exhibit deverbative nouns that are derived from verbs that start in a vowel. According to Mletshe (2010, p. 20) non-personal deverbative also have prefixes of classes which include impersonal nouns and the suffix [-o]. In Tonga derivational morpheme [-o] triggers the lexicon to changes its meaning completely. The configuration of vowels in examples **ii, iii, iv, vi, vii** and **viii** above causes hiatus and this is dispreferred in Tonga and in many other Bantu languages. Therefore, the vowel of the prefix /*lu-/* and /*mu-/* undergoes into semi-vocalisation and becomes a glide for easy articulation. It is important to note that this process of semi-vocalisation does not change the category of the word, but in this instance the prefix only inflects the verb root (VR). The final category is indicated by a long vowel in some cases like in viii, *iya* [ija]'learn' lu-iy-(a) o> *lwiiyo* [lʷi:jo] 'education'. The derivational morpheme [-o] triggers a complete change in the word category.

Respondent 7 and 9 had to indicate the following data in **x** up to **xviii** showing impersonal deverbatives derived from verbs that do not start in a vowel.

ix. Syoma [ʃoma] 'trust' > lu- yom (a)- o > *lusyomo* [luʃomo] 'faith'
[Prf-VR- FV- DER MORPHEME] [Nominal]

x. *Sama* [sama]'wear' > zi- sam- (a)- o > *zisamo* [zisamo] 'clothes'
[Prf- VR- FV- DER MORPHEME] [Nominal]

xi. *Bomba* [βomba] ' be humble' > lu-bomb –(a)- o *lubombo* [luβoᵐbo]'humbleness'
[Prf- VR- FV- DER MORPHEME] [Nominal]

xii. *Sula* [sula] 'hate' >lu-sul-(a)-o > *lusulo* [lusulo] 'hatred'
[Prf-VR-FV- DER MORPHEME] [Nominal]

xiii. *Futuka* [futuɣa] 'saved' > lu-futuk- (a) -o > *lufutuko* [lufutuɣo]'salvation'

[Prf-VR - FV- DER MORPHEME] [Nominal]

xiv. *Beleka* [βeleɣa] 'work' > mu-belek (a)- o > *mubeleko* [muβeleɣo] 'job/ work'
[Prf- VR- FV- DER MORPHEME] [Nominal]

xv. *Sandula* [sandula]'reply/ answer'> Ø- n-sandul-(a) – o> *nsandulo* [nsandulo]'an answer'
[Prf- Nasal-VR - FV- DER MORPHEME] [Nominal]

xvi. Myonta [mjonta] 'kiss' > ka-myont- (a) –o > *kamyonto* [ɣamjonto] 'the kiss'
[Prf-VR- FV- DER MORPHEME] [Nominal]

xvii. Sela [sela] 'pay bride prize' > Ø-n-sel- (a) –o > *nselo* [nselo] 'bride prize'
[Prf- Nasal- VR-FV- DER MORPHEME] [Nominal]

xviii. *Sasa* [sasa] 'sour'> ma-sas-(a)- e > *masase* [masase] 'sour milk'
[Prf-VR- FV- DER MORPHEME] [Nominal]

xix. *Lula* [lula] 'biter' > mu-lul-u-e-(a) > *mululwe* [mululwe] 'traditional tree'
[Prf- VR-DER MORPHEME- FV] [Nominal]

Derivational morpheme [-o-] triggers a change in word category as indicated above. This change is most prominent in Tonga impersonal deverbatives as show in **x** up to **xviii.** While morpheme /-e-/ influences other verbs as shown in xviii and xix above.

Some forms of deverbatives are triggered from passive extended verb roots that precedes suffixes [-i] and [-a], as is illustrated in **a)** to **e)** below:

a) *Yandwa* [jandwa] 'love' > mu-yand-u-i- (a) > *muyandwi* [mujandwi] 'beloved one'
[Prf-VR-Passive Ext-Derivational Morpheme-FV] [Nominal]

b) *Lelwa* [lelwa] 'looked after'> mu-lel-u- a>*mulelwa* [mulelwa] 'one who is being looked after'
[Prf-VR-Passive Ext-Derivational Morpheme-FV] [Nominal]

c) *Bumbwa* [βumbwa] 'be created' > chi-bumb-u -a > *chibumbwi* [ʧiβumbwa] 'creation'
[Prf-VR-Passive Ext-Derivational Morpheme-FV] [Nominal]

d) *Kkolwa* [kolwa] 'be drunk' > mu-kkol-u-i-(a) > *mukkolwi* [mukolwi] 'a drunkard'
[Prf-VR-Passive Ext-Derivational Morpheme-FV] [Nominal]

e) *lukwa* [kuɣwa] 'be plait'> mu-luk-u-i-(a)> mulukwi [muluɣwi] 'one who is plaited'
[Prf-VR-Passive Ext-Derivational Morpheme-FV] [Nominal]

From passivized verbs different deverbatives are created in Tonga.

The Influence of Prefix in Tonga Deverbatives

In Tonga language, prefix can change the category of the word completely in certain environment as shown below in a) to f) below. It is important to note that in Tonga language this is not much productive as that of suffixes because most of prefixes only inflect.

a) *Mena* [mena]'swallow' > ba-men- a > *bamena* [βamena] 'the one who swallows'
[Prf- VR-FV] [Nominal]

b) *Buta* [βuta] 'collect' > ba-but-a- > *babuta* [βaβuta] 'the one who collect'
[Prf- VR- FV] [Nominal]

c) *Lila* [lila] 'cry' > zi-lil-a > zi*lila* [zilila]'the one who cries'

[Prf- VR-FV] [Nominal]

d) *Luma* [luma] bite' > tu-lum-a > *tuluma* [muluma] 'one that bite'
[Prf- VR- FV] [Nominal]

e) *Panga* [paŋga] 'make' > ba-pang-a > *bapanga* [βapaŋga] 'the one who make things'
[Prf-VR- FV] [Nominal]

f) *Lya* [lja] 'eat' > ba-ly-a> balya [βalja] 'those who eat'
[Prf-VR- FV] [Nominal]

The above data in **a)** to **e)** indicate that the category of the word changes from the verb to a noun due to the influence of the prefix. This is triggered by a predictable prefix that can only be attached to an imperative. In ChiTonga, when class prefixes 1, 2, 7, 8, 11, 12 and 13 are attached to imperative verbs, they trigger a grammatical change to a noun as shown above. In this instance the final vowel does not changes when a derivational prefix is attached to the imperative verb. Most of the deverbatives that are formed they relatively refer to living organisms. For instance in **c)** above an imperative verb *lila* 'cry' derives to *zilila* 'the one who cries', after class 7 prefix /***zi-/*** is attached to it and in **e)** imperative *panga* 'make' becomes *bapanga* [βapaᵑga] 'the one who make things' when class 2 prefix /***ba-***/ is attached to it.

Tonga Gerund Nouns

Gerund nouns and present participle forms of verbs are ambiguous, unless the context is clearly shown. They display a mixture of nominal and verbal properties that make gerunds nominal and verbal simultaneously (Baker, 2005, p. 5). However, data indicated in a) to g) and sentences in i) up to v) below shows that gerundive constructions in Tonga are common since nearly every verb can form a gerund if Noun Class 15 prefix ku- attached to it. Noun Class 15 prefix /ku-/ in ChiTonga indicate infinitive nouns from those of infinite verbs. Mainly they are formed from the imperative form of the verb when the prefixes /ku-/ is joined with the verb as the data presented below:

a) *Beteka* [βeteɣa] 'judge'> ku-betek-a> *kubeteka* [ɣuβeteɣa] 'judging'
[Prf-VR- FV] [Nominal]

b) *Pa* [pa] 'give' > ku-p-a > *kupa* [ɣupa] 'giving'
[Prf-VR- FV] [Nominal]

c) *Langa* [laᵑga] 'look' > ku-lang-a > *kulanga* [ɣulanga] 'looking'
[Prf-VR- FV] [Nominal]

d) *Seka* [seɣa] 'laugh'> ku-sek-a > *kuseka* [ɣuseɣa] 'laughing'
[Prf-VR- FV] [Nominal]

e) *jika* [ʤiɣa] 'cook' > ku-jik-a > *kujika* [ɣuʤiɣa] 'cooking'
[Prf-VR- FV] [Nominal]

f) *Lela* [lela] 'rule'> ku- lel- a > *kulela* [ɣulela] 'ruling'
[Prf-VR- FV]> [Nominal]

g) *Lila* [lila] 'cry' > ku-lil-a > *kulila* [ɣulila] 'crying'
[Prf-VR- FV] [Nominal]

Gerundive Nouns in Sentences

a) ***Kuyamba*** *kwakwe nkubotu* [ɣujamba ɣwaɣwe nkuβotu] 'his/her swimming is good'
b) ***Kubeteka*** *ooku nkwabuyo* [ɣuβeteɣa o:ɣu ⁿkwaβujo] 'this judgment is not fair'
c) *Muyiisi* ***wasika*** *kale* 'the teacher has already come'

Gerundive nouns function as verbs and they express the progressive aspect in sentences (Everlyne (2023, pp. 27-28). For instance above sentence in a) ***kuyamba*** *kwakwe nkubotu* [ɣujamba *ɣwaɣwe* nkuβotu] 'his/her swimming is good'. *Kuyamba* 'swimming' precedes possessive pronoun *kwakwe* 'his/ hers'. Gerunds are derived noun since attachment of the noun prefix results in shifting the grammatical category of the imperative verb.

CONCLUSION

This article presented Tonga morphosyntactic structure of deverbatives. It demonstrated how deverbatives are formed in Tonga and anlysed their morphophological properties. Our main findings show that deverbatives in Tonga are mainly through suffixation and few that are from prefixation. In this study it is clearly indicated by the data that were collected as such suffixes in ChiTonga that take the shape **/-i-/, /-e-/, /-o-/, /-ma/ and /-nyina/** and few prefixes trigger idiosyncratic phonetic and morphological alternations in of some verb root. Some of these suffixes are obligatory and make phonetic modification of the root through derivation. This implies that particular nominal derivations are morphologically conditioned. We have demonstrated that when clitics /-**ma**/ and /-**nyina**/ that are obligatory attached to personal deverbative their category completely change to relative deverbatives. Again, in pejoratives, it has been shown that when class prefixes for diminutives are attached to deverbatives, they only inflect in a derogatory nature. Evidence that Tonga nouns are systematically organized in the Noun Class System is given in each transcribed derived nominal above. The study justified that derivation modifies the meaning of the root in formation of new derivatives though the meanings of it and derivatives are related but they are not the same.

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